



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor: Allen, Douglas C.

Docket No. SP03-146

Serial No: 10/699,591

Group Art Unit: 2125

Filing Date: October 31, 2003

Examiner: Cabrera, Zoila E.

Title: Method for Optimizing Glass Strain

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**PETITION TO WITHDRAW  
HOLDING OF ABANDONMENT UNDER 37 CFR 1.181**

Sir:

The above-identified application became abandoned for failure to file a timely reply to the Office Action mailed August 24, 2005.

Applicant asserts that the abandonment was improper and hereby requests reconsideration for reinstatement of this application.

**1. Petition fee**

The Commissioner is authorized to charge the necessary funds \$130.00 to Deposit Account No. 03-3325.

**2. Facts and Argument**

Applicant first became aware of the abandonment on June 14, 2006 after a telephone message left by the Examiner as a courtesy. In the message, and again during a telephone conversation with the Examiner on the following day, the Examiner related that the application had been abandoned as a result of lack of response to an Office action of August 24, 2005. More specifically, the abandonment was cited as due to a non-compliant response,

and subsequent failure to respond to the Office Action. The Examiner further offered that the record would seem to indicate no intent to abandon the application, in spite of it having done so, and that the record “didn’t make sense”, hence the courtesy call.

After carefully reviewing the record available on the USPTO’s public PAIR system, Applicant has pieced together the following chain of events:

1. On August 24, 2005 the Examiner mailed a first rejection of the claims of the application.
2. On September 9, 2005 the Office received notice from the U.S. Post Office that the preceding communication was undeliverable as addressed. [During this period the attorney prosecuting the application on behalf of the Applicant had moved, but failed to notify the Office of the correspondence address change. This failure was later independently discovered by the Assignee of the application, and the prosecuting attorney notified of the pending action. The prosecuting attorney subsequently obtained a copy of the Examiner’s rejection.]
3. On December 27, 2005 the attorney of record timely filed by facsimile a response to the August 24<sup>th</sup> Office Action, as indicated on the first page of the Response (e.g. “In response to the Office Action dated August 24, 2005, please amend the above referenced...”. Unfortunately, the paper was incorrectly labeled by the attorney as a response to a restriction requirement, and then logged as such by the Office.
4. Apparently alerted to the incorrect label, the prosecuting attorney faxed a second copy of the response 30 minutes later (still December 27, 2005), labeled as a Reply. The second copy failed to fax correctly, however, resulting in the Office receiving legible copies of only the first page and the last several pages of the second communication.
5. On January 13<sup>th</sup> 2006, the Assignee of the application, Corning Incorporated, mailed a revocation of the prosecuting attorney’s power of attorney (POA), and a change in correspondence address. The revocation of the POA was logged by the Office on January 17<sup>th</sup>.
6. On January 18<sup>th</sup> 2006, the Office mailed a Notice of Non-Compliant Amendment, based on the previously failed second facsimile transmission of December 27<sup>th</sup> 2005, to the original prosecuting attorney at the already-established undeliverable address (i.e. not the new, correct correspondence address received by the Office.

7. On February 7, 2006 the Office mailed notice to the original prosecuting attorney, again at the original, undeliverable address, informing him that his power of attorney had been revoked. A second notice was mailed on the same day to the Assignee at the correct, new address, stating that the new POA and change in correspondence address had been accepted.
8. On February 10, 2006 the Office received notice from the U.S. Post Office, not surprisingly, that the notice of revocation mailed to the original prosecuting attorney had been undeliverable.
9. On June 14<sup>th</sup> 2006, the Examiner notified Applicant's Assignee of the application abandonment, with a follow-up taking place during a conversation on June 15<sup>th</sup>.
10. On June 28, 2006, the Decision for Abandonment mailed on June 26, 2008 was received.

Preceding the mailing of the notice of non-compliant amendment the Office received from the Assignee a change in the correspondence address. Had the Office mailed the notice to the new correspondence address, abandonment of the application would have been avoided.

More importantly, and notwithstanding the errors made by the original prosecuting attorney, Applicant asserts that a proper response to the first Office Action rejection was in fact timely filed. Although the paper was incorrectly labeled, a cursory examination of the paper would have made clear to the reader that the communication was a reply to the Office Action of August 24<sup>th</sup>, as clearly stated in the first paragraph of the first page of the paper. Although labeled as a response to a restriction requirement, there was no evidence in the record of a restriction having been imposed (which indeed, there had not), nor of an election being made within the paper. A reasonable person would conclude that the paper was incorrectly labeled and understood the communication as being responsive to the August 24<sup>th</sup> Office Action. Thus, albeit the second version of the response, faxed 30 minutes later, was unreadable, the Office was nonetheless in possession of a proper, legible response to the originally filed rejection. Applicant further points out that a label for the filed paper is not strictly required. See for example, section 502 of the MPEP setting forth the recommended identifying information which should be included on papers submitted pertaining to a filed application (see ¶5.01): Application Number; Art Unit; Filing Date; Examiner Name; Invention Title; Confirmation Number. Applicant contends these recommended identifiers were conformed to.

Accordingly, Applicant asserts that the abandonment was improper, and respectfully requests that the Decision for Abandonment in the above-referenced application be withdrawn and the application reinstated.

7/7/06  
Date

<b>CERTIFICATE OF MAILING</b>	
<b>UNDER 37 C.F.R. § 1.8</b>	
I hereby certify that this paper and any papers referred to herein are being deposited with the U.S. Postal Service, as first class mail, postage prepaid, addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on:	
<u>7/7/06</u> Date	
<u>Kevin M. Able</u> Kevin M. Able	<u>7/7/06</u> Date

Respectfully submitted,  
CORNING INCORPORATED

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Enclosures (obtained from USPTO PAIR)

08/24/05 Office Action

12/27/05 Response (first facsimile)

12/27/05 Response (second facsimile)

1/13/06 Revocation of Power of Attorney and change of correspondence address

1/18/06 Notice of Non-Compliant Amendment

2/7/06 Notice Regarding Change of Power of Attorney (notice to original attorney)

2/7/06 Notice Regarding Power of Attorney (acceptance)

6/26/06 Notice of Abandonment



# UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,591	10/31/2003	Douglas C. Allan	CRNG.047	2625

7590 08/24/2005  
VOLENTINE FRANCOS, P.L.L.C.  
Suite 150  
12200 Sunrise Valley Drive  
Reston, VA 20191



EXAMINER

CABRERA, ZOILA E

ART UNIT PAPER NUMBER

2125

DATE MAILED: 08/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/699,591

Applicant(s)

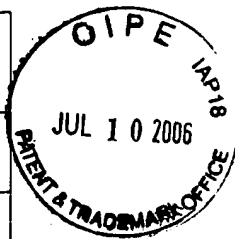
ALLAN ET AL.

Examiner

Zoila E. Cabrera

Art Unit

2125



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/31/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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**DETAILED ACTION**

***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 14-22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The steps of claims 14-22 consist solely of mathematical operations without practical application in the technological arts or simply manipulates abstract ideas without practical application in the technological arts. Please note that the language of claim 14-22 is directed merely to an abstract idea that is not tied to a technological art, environment, or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101. Merely setting or determining values is too preliminary to permit one of ordinary skill to realize any usefulness in the technological arts.

Please amend claim 14 to properly recite that the computer is used for determining the steps recited. "providing a computer" does not necessarily means that the computer is used to determine the parameters and thereby modify them. A computer can be placed with a program and not necessarily use such computer as the claims are recited.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 7, 13 are rejected under 35 U.S.C. 102(b) as being anticipated by **DeBoynton (US 6,304,383)** the subsequent thermal processing includes forming at least one semiconductor layer over the glass material ( Col. 4, lines 59-67).

3).

As for claim 1, **DeBoynton** discloses a method of determining parameters of plurality of thermal cycles to achieve a set glass strain level (Abstract), the method comprising:  
providing a plurality of input parameters for a glass substrate and a plurality of parameters for a plurality of thermal cycles (Fig. 5, element 248; Col. 7, lines 59- Col. 8, line 4); and providing a computer which is adapted to iteratively modify at least one of the plurality of thermal cycle parameters so the glass strain is not greater than the set glass strain level after a final thermal cycle is completed (Fig. 5, element 186, 286; Abstract; Col. 2, line 62 - Col. 3, line 36; Col. 7, lines 43-49).

7. A method as recited in claim 1, wherein the set glass strain level is a compaction level (Col. 5, lines 1-10 and lines 26-29).



13. A method as recited in claim 1, wherein the parameters are pairs of time and temperature (Col. 8, lines 57-62; Col. 8, lines 30-38), please note that time and temperature parameters are needed for thermal control).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over

**DeBoynton (US 6,304,383) in view of Bocko (US 5,597,395).**

DeBoynton discloses the limitations of claim 1 and further discloses the limitations of claim 6, the subsequent thermal processing includes forming at least one semiconductor layer over the glass material ( Col. 4, lines 59-67). But DeBoynton fails to disclose the limitations of claims 2-5. However, Bocko discloses such limitations as follows:

2. A method as recited in claim 1, wherein the iterative modifying includes providing a penalty function, which provides constraints on allowed temperature variations, heating and cooling rates, hold times, and durations of the plurality of thermal cycles (Col. 4, lines 17-35; Col. 5, lines 39-43).

3. A method as recited in claim 1, wherein the input parameters include parameters from the manufacturing thermal history of a glass material (Col. 6,

lines 63-65).

4. A method as recited in claim 3, wherein the input parameters includes parameters for a subsequent thermal processing sequence (Col. 6, lines 63-67).

5. A method as recited in claim 4, wherein the input parameters include a single choice of time and temperature for the manufacturing thermal history and the subsequent thermal processing (Col. 6, lines 63-67).

Therefore, it would have been obvious to a person of the ordinary skill in the art at the time the invention was made to combine the teachings of **DeBoynton** with **Bocko** because it would provide an improved control system for precompacting glass, particularly glass sheets with minimal damage to the glass sheet during the precompaction process (Col. 2, lines 40-45; Col. 1, lines 10-14).

4. Claims 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over **DeBoynton (US 6,304,383)**.

As for claims 8-11, **DeBoynton** discloses the limitations of claims 1 and 7 above. **DeBoynton** further discloses the limitations of claim 12, all of the plurality of parameters is iteratively modified (Col. 8, lines 57-62). However, **DeBoynton** fails to disclose compaction magnitudes not exceeding approximately 10 ppm or ranges of approximately 0 ppm and -10 ppm; the glass strain is less than approximately 10ppm;

and plurality of parameters is in the range of approximately  $10^{3.3}$  to approximately  $10^{6.6}$ .

However, absent any evidence of criticality or unexpected results, such magnitudes and ranges are believed to represent an obvious matter of design choice to one of ordinary skill in the art. Therefore, it would have been obvious to a person of the ordinary skill in the art at the time the invention was made to have used such magnitudes and ranges during the experimentation of compaction process of glasses.

***Allowable Subject Matter***

5. Claims 14-22 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 101.

The following is a statement of reasons for the indication of allowable subject matter: The allowability of the claims resides, at least in part, that the closest prior art of record **DeBoynton et al. (US 6,304,383)** does not disclose or suggest, alone or in combination, the steps of:

As for independent claim 14, **e) calculating a value of viscosity at a current temperature and a current fictive temperature; f) calculating a change in the fictive temperature for a given change in time; g) updating a set of data including the current temperature, the current time and storing these data; h) determining if the current time from step g) is set final time, and if not repeating steps e) through h) , and if so, termination the method**, in combination with the other elements and features of the claimed invention.

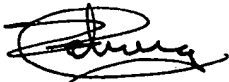
Art Unit: 2125

**Conclusion**

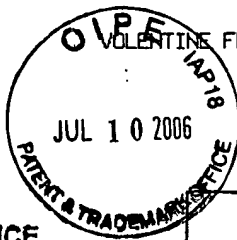
6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning communication or earlier communication from the examiner should be directed to Zoila Cabrera, whose telephone number is (571) 272-3738. The examiner can normally be reached on M-F from 8:00 a.m. to 5:30 p.m. EST (every other Friday).

If attempts to reach the examiner by phone fail, the examiner's supervisor, Leo Picard, can be reached on (571) 272-3749. Additionally, the fax phones for Art Unit 2125 are (703) 872-9306. Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist at (703) 305-9600.



Zoila Cabrera  
Patent Examiner  
8/20/05



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Appl. No. 10/699,591  
Response to Office Action  
Dated August 24, 2005

**IN THE UNITED STATES  
PATENT AND TRADEMARK OFFICE**

Appl. No.: 10/699,591  
Applicant(s): Douglas C. Allen  
Filed: October 31, 2003  
TC/A.U.: 2100/2125  
Examiner: Zoila Cabrera  
Atty. Docket: CRNG.047 (SP03-146)  
Title: Method for Optimizing Glass Strain

**CERTIFICATE OF MAILING OR  
TRANSMISSION**

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Patent and Trademark Office at (571)  
273-8300

On: 27 December 2005

By:   
William S. Francos

**RESPONSE TO RESTRICTION REQUIREMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In response to the Office Action dated August 24, 2005, please amend the  
above referenced application as follows and reconsider the application in light of  
the following remarks.

**This paper includes (each beginning on a separate sheet):**

**1. Remarks / Discussion of issues;**

**BEST AVAILABLE COPY**

DEC 27 2005

Appl. No. 10/599,691  
Response to Office Action  
Dated August 24, 2005**REMARKS / DISCUSSION OF ISSUES**

Claims 1-22 are pending in the claims. As no amendments have been made to the pending claims, Applicant directs the Examiner to the originally filed claims.

**Allowable Subject Matter**

Applicant gratefully acknowledges the indication of allowability of claims 14-22, provided that a rejection under 35 U.S.C. § 101 be overcome. For at least the reasons set forth below, it is respectfully submitted that these claims are patentable in present form.

**Rejections under 35 U.S.C. § 101**

Claims 14-22 were rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. For at least the reasons set forth below, it is respectfully submitted that these claims are patentable.

The Examiner proffers that claims 14-22 consist solely of mathematical operations without practical application in the technological arts or simply manipulates abstract ideas without practical application in the technological arts. Applicants respectfully, but strongly disagree.

It is well-established that unpatentable mathematical algorithms are identifiable by showing they are merely abstract ideas constituting disembodied concepts or truths that are not 'useful.' As such, to be patentable an algorithm must be applied in a 'useful' way.'

Claims 14-22 are drawn to a useful method. To wit, claim 14 is drawn to a method of setting a glass strain level. This setting occurs during glass fabrication and is useful in providing glass with a particular strain level. For example, and as noted in the filed application, in LCD displays, the display glass is normally required to have a strain level (in absolute magnitude) of 10 ppm or less. If the compaction of the glass is greater than approximately 10 ppm, misalignment and

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Response to Office Action  
Dated August 24, 2005

mis-registration of overlapping patterns in the LCD glass can result in image distortion. Accordingly, it is respectfully submitted that claim 14 and the claims that depend are drawn to a method including calculations that in-and-of themselves are applied in a useful way to set the glass strain.

In addition, the method of claims 14-22 are in no way abstract ideas constituting disembodied concepts or truths that are not 'useful.' To this end, the calculations of claims 14-22 include setting a set of initial fictive temperatures to an initial temperature value. The method of claim 14 includes calculating a value of viscosity at a current temperature and a current fictive temperature; calculating a change in the fictive temperature for a given change in time. If the current time equals a set final time, the method terminates. If not, certain steps in the method are repeated. In this manner the method enables a user to determine from material parameters and processing sequences of, for example, glass manufacturers whether a particular glass strain value may be realized. If not, the method allows the manufacturer to calculate changes in the process to meet the desired strain levels. As such, the method of claims 14-22 are clearly useful and are not abstract ideas constituting disembodied concepts or truths.

For at least the reasons set forth above, it is respectfully submitted that the rejection based on 35 USC § 101 is improper and should be withdrawn.

#### **Rejections under 35 U.S.C. § 102(b)**

Claims 1, 7 and 13 are rejected under 35 U.S.C. § 102(b) as being anticipated by DeBoyton, et al. (U.S. Patent 6,304,383). For at least the reasons set forth herein, it is respectfully submitted that this rejection is improper and should be withdrawn.

A proper rejection under 35 U.S.C. § 102(b) requires that all of the claimed elements be found in the applied art. If a single claimed element is not found in the applied art, a prima facie case of anticipation cannot be properly established. Claim 1 is drawn to a method of determining parameters of a plurality of thermal cycles to achieve a set glass strain level. The method includes:

providing a plurality of input parameters for a glass substrate and a

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Response to Office Action  
Dated August 24, 2005

***plurality of parameters for a plurality of thermal cycles; and providing a computer which is adapted to iteratively modify at least one of the plurality of thermal cycle parameters so the glass strain is not greater than the set glass strain level after a final thermal cycle is completed.***

It is respectfully submitted that Deboyton, et al. lacks at least the disclosure of at least one of the features of claim 1. To this end, the reference to Deboyton, et al. is drawn to a temperature compensated optical filter and not to a method of determining parameters of a plurality of thermal cycles to achieve a **set glass strain level**. The optical apparatus 30 of Deboyton, et al. includes a holder 34; an optically transmissive substrate 40 and an interference filter 46 interposed between the substrate 40 and the holder 34. Temperature dependent thermal mismatch stresses are exerted on the filter 46. In embodiments disclosed in Deboyton, et al., there are compensating stresses provided by the substrate, and the holder and the adhesive. In short, the interference filter is compensated for temperature-induced changes by stresses created by its surrounding components. In yet another embodiment, electro-magneto-strictive materials are used for the interference filter materials. Interference properties of the filter can be altered by application of an electromagnetic field. The application of the field is via a controller 186, 286.

First, it is noted that the compensation for thermal stress in an interference filter is in no way the same as modifying thermal cycle parameters to maintain a certain glass strain level after completion of a final thermal cycle. Rather than setting a glass strain level in a glass material, the reference to Deboyton, et al. selects the strain in a substrate and a holder to compensate for thermal issues that can alter the optical interference properties of a filter. Moreover, the iterative process of the claims under examination is drawn to attaining a particular glass strain level, and not selecting materials to offset strain in a structure.

In addition, the controller of the reference to Deboyton, et al. controls an applied E/M field. There is no teaching nor suggestion of ***iteratively modifying at least one of the plurality of thermal cycle parameters so the glass strain is not greater than the set glass strain level after a final thermal cycle is***



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Response to Office Action  
Dated August 24, 2005

**completed.** Finally, there is no final thermal cycle in the reference to Deboyton, et al.

For at least the reasons set forth above, it is respectfully submitted that the reference to Deboyton, et al. lacks at least the disclosure of at least one of the features of claim 1. As such, a prima facie case of anticipation of claim 1 cannot be established based on Deboyton, et al. Therefore, claim 1 and the claims that depend therefrom are allowable over the applied art. Allowance is earnestly solicited.

#### **Rejections under 35 U.S.C. § 103(a)**

1. Claims 2-6 are rejected under 35 U.S.C. § 103(a) as being obvious in view of Deboyton, et al. and Bocko (U.S. Patent 5,597,395).

2. Claims 8-12 are rejected under 35 U.S.C. § 103(a) as being obvious in view of Deboyton, et al.

As noted previously, claims 2-12, which depend from claim 1 immediately or ultimately, are patentable over the applied art at least because of their dependence on claim 1. Therefore, and while in no way conceding to the propriety of these rejections, claims 2-12 are also allowable over the applied art.

The above notwithstanding, Applicants respectfully traverse the rejection of claims 8-12 as being merely design choices of the artisan of ordinary skill. Applicant notes that the ranges of strain have applicability in many settings, such as the maximum compaction in LCD substrates. The attainment of these parameters is not a matter of design choice. Moreover, the Examiner has not provided evidence, extrinsic or from personal knowledge of the asserted routine nature of these claims. As such, the present rejection is traversed as lacking foundation. If the Examiner relies upon extrinsic evidence for support for this assertion, such evidence is respectfully requested. If, however, the assertion is from the personal knowledge of the Examiner, an affidavit under 37 C.F.R. 1.104(d) (2) is respectfully requested. Else, the rejection of claims 8-12 should be withdrawn.

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Response to Office Action  
Dated August 24, 2005

### Conclusion

In view of the foregoing, applicant(s) respectfully request(s) that the Examiner withdraw the objection(s) and/or rejection(s) of record, allow all the pending claims, and find the application in condition for allowance. If any points remain in issue that may best be resolved through a personal or telephonic interview, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and further replies to charge payment or credit any overpayment to Deposit Account Number 50-0238 for any additional fees, including, but not limited to, the fees under 37 C.F.R. §1.16 or under 37 C.F.R. §1.17.

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Response to Office Action  
Dated August 24, 2005

Respectfully Submitted

on behalf of:

Corning Incorporated



by: William S. Francos, Esq.

(Reg. No. 38,456)

December 27, 2005

Volentine, Francos & Whitt, PLLC  
Two Meridian Boulevard  
Wyomissing, PA 19610  
(610) 375-3513 (v)  
(610) 375-8380 (f)

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Appl. No. 10/699,591  
Response to Office Action  
Dated August 24, 2005

**IN THE UNITED STATES  
PATENT AND TRADEMARK OFFICE**

Appl. No.: 10/699,591  
Applicant(s): Douglas C. Allen  
Filed: October 31, 2003  
TC/A.U.: 2100/2125  
Examiner: Zoila Cabrera  
Atty. Docket: CRNG.047 (SP03-146)  
Title: Method for Optimizing Glass Strain

**CERTIFICATE OF MAILING OR  
TRANSMISSION**

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Patent and Trademark Office at (571)  
273-8300

On: 27 December 2005

By:   
William S. Francos

**REPLY UNDER 37 C.F.R. § 1.111**

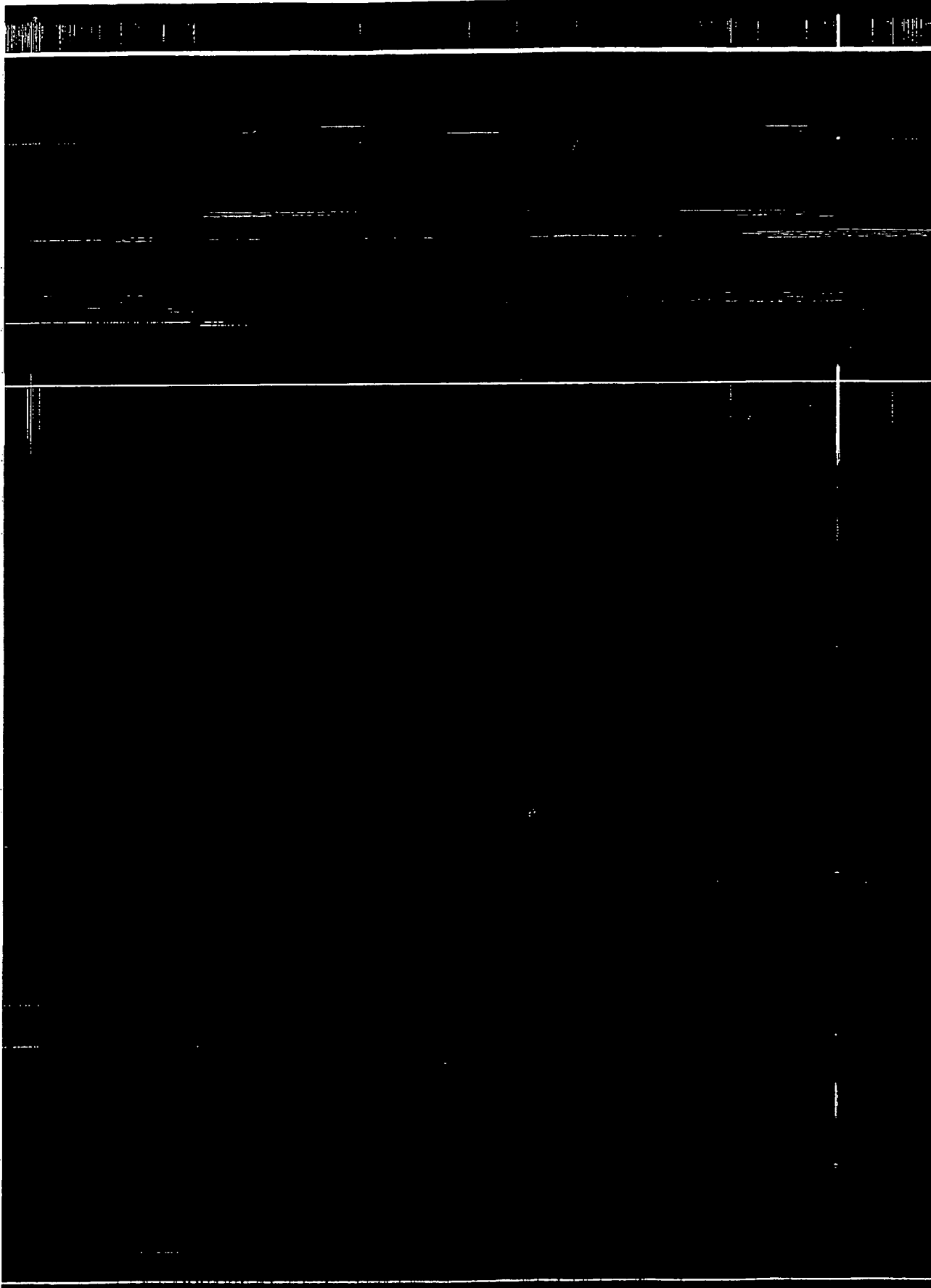
Commissioner for Patents  
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Sir:

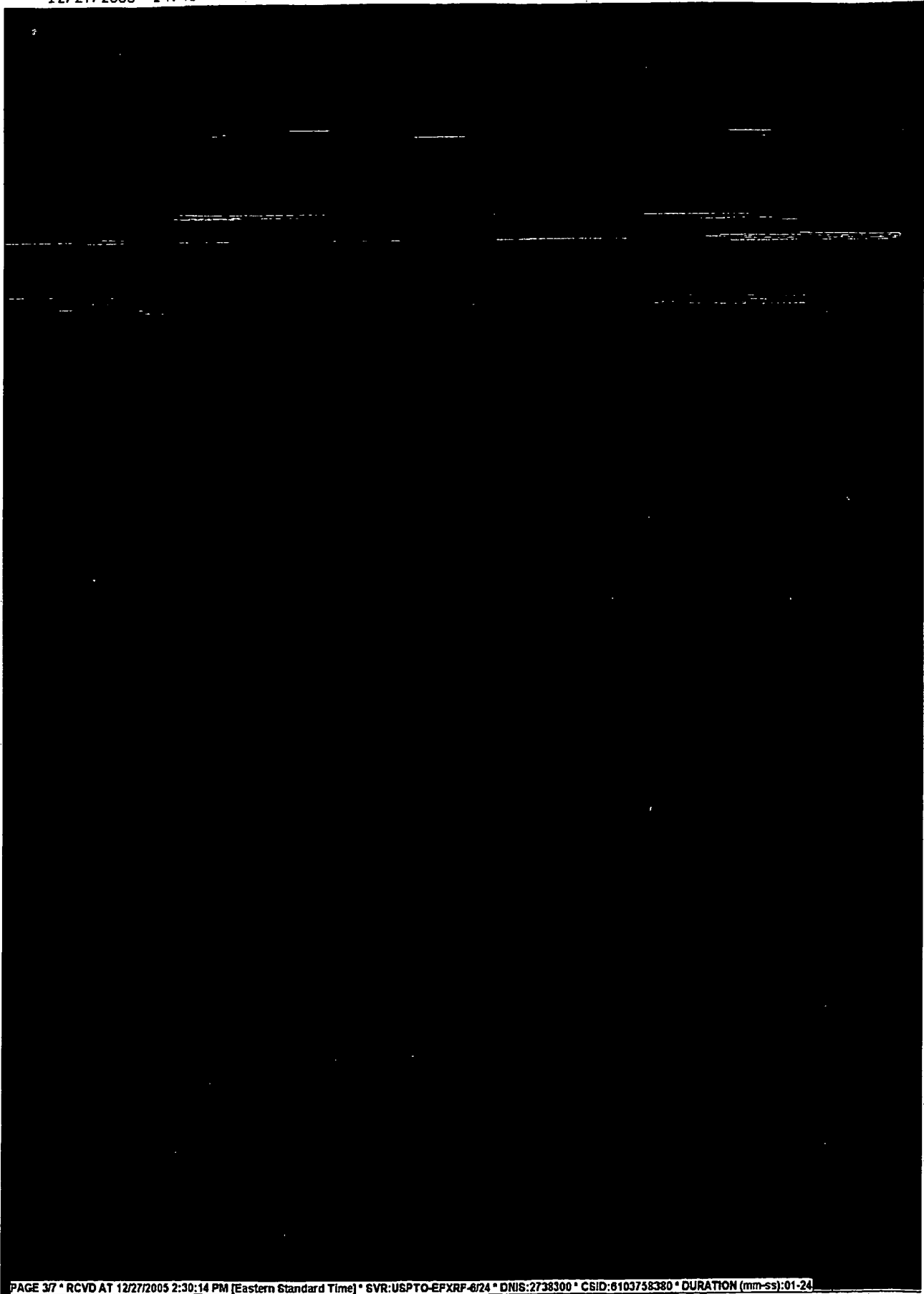
In response to the Office Action dated August 24, 2005, please amend the  
above referenced application as follows and reconsider the application in light of  
the following remarks.

**This paper includes** (each beginning on a separate sheet):

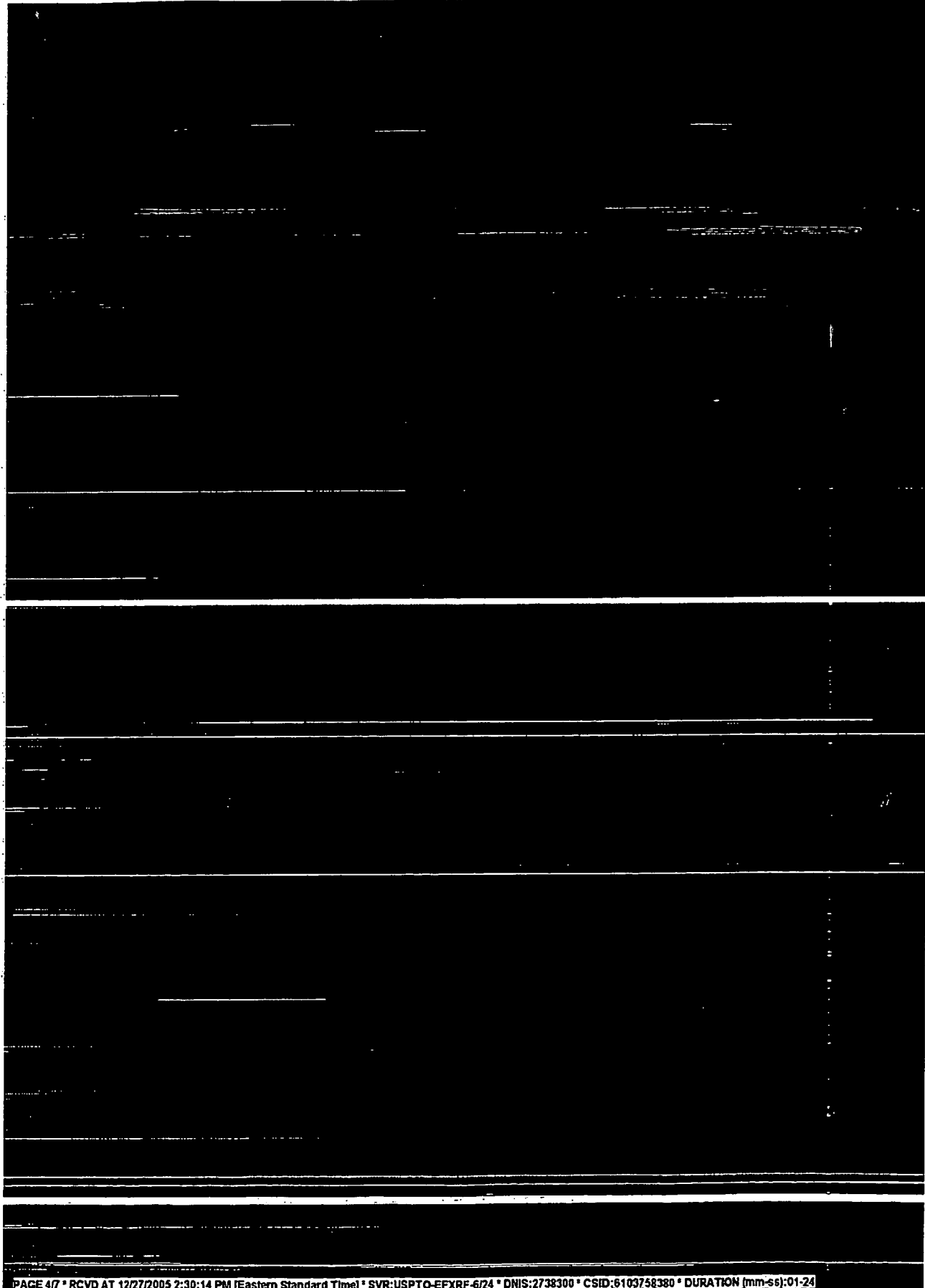
- 1. Remarks / Discussion of Issues;**



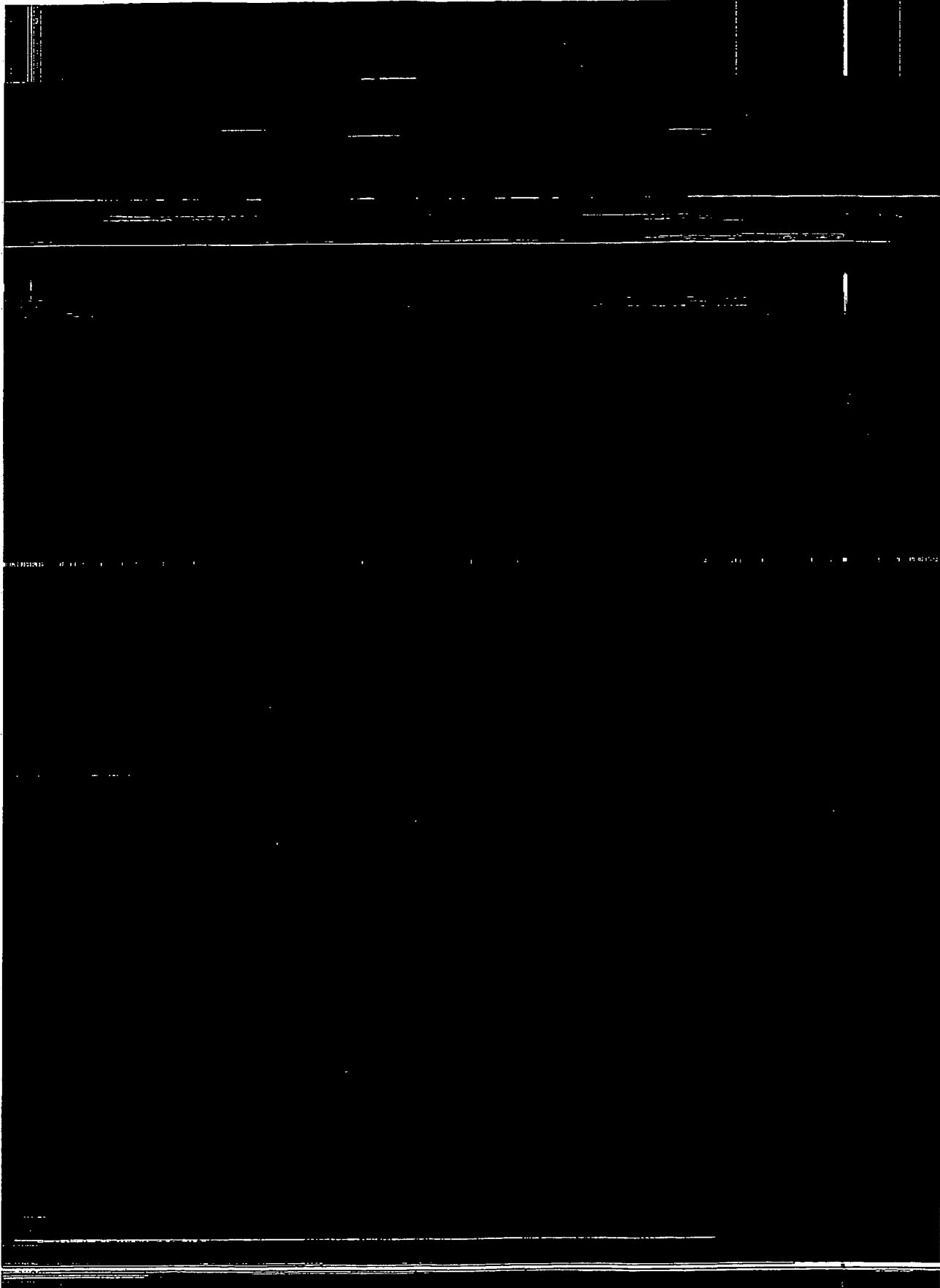
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### Conclusion

In view of the foregoing, applicant(s) respectfully request(s) that the Examiner withdraw the objection(s) and/or rejection(s) of record, allow all the pending claims, and find the application in condition for allowance. If any points remain in issue that may best be resolved through a personal or telephonic interview, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and further replies to charge payment or credit any overpayment to Deposit Account Number 50-0238 for any additional fees, including, but not limited to, the fees under 37 C.F.R. §1.16 or under 37 C.F.R. §1.17.

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Appl. No. 10/699,591  
Response to Office Action  
Dated August 24, 2005

Respectfully Submitted

on behalf of:

Corning Incorporated



by: William S. Francos, Esq.

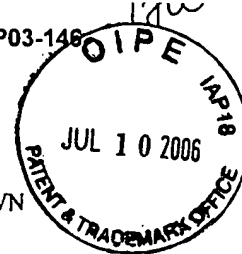
(Reg. No. 38,456)

December 27, 2005

Volentine, Francos & Whitt, PLLC  
Two Meridian Boulevard  
Wyomissing, PA 19610  
(610) 375-3513 (v)  
(610) 375-8380 (f)



ATTORNEY DOCKET NO.: SP03-148

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Douglas Clippinger Allan, et al

Serial No: 10/699591

Group Art Unit: UNKNOWN

Filed: October 31, 2003

Examiner: UNKNOWN

For: METHOD OF OPTIMIZING GLASS STRAIN

**REVOCATION OF ORIGINAL POWER OF ATTORNEY  
AND GRANT OF NEW POWER OF ATTORNEY**Commissioner for Patents  
Alexandria, VA 22313-1450

Sir:

Applicant(s) Douglas C. Allan, Motoya Anma, and Josef C. Lapp, hereby revoke the previous Power of Attorney in the above case to Volentine Francos & Whitt, William S. Francos, Esq. (Reg. No.: 38,456) and hereby grant their power of attorney to Corning Incorporated, customer number 22928 both jointly and separately as their attorneys with full power of substitution and revocation to prosecute this application and to transact all business in the U.S. Patent and Trademark Office connected therewith, and to receive the Letters Patent.

Please send all future correspondence concerning this application to Kevin M Able at the following address:

Corning Incorporated  
Intellectual Property Dept.  
SP-TI-3  
Corning, NY 14831

If there are any other fees due in connection with the filing of this response, please charge the fees to Deposit Account No. 03-3325. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our deposit account.

Date: 1/13/06Respectfully submitted,  
CORNING INCORPORATED

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Commissioner of Patents, Alexandria, VA 22313-1450

1/13/06  
Date of Deposit  
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By:

[Signature]  
Mark W. Lauroesch  
Assistant Secretary



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,591	10/31/2003	Douglas C. Allan	CRNG.047	2625

7590 01/18/2006  
VOLENTINE FRANCOS, P.L.L.C.  
Suite 150  
12200 Sunrise Valley Drive  
Reston, VA 20191



EXAMINER

CABRERA, ZOILA E

ART UNIT PAPER NUMBER

2125

DATE MAILED: 01/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Notice of Non-Compliant  
Amendment (37 CFR 1.121)**

Application No.

10/699591

Applicant(s)

Examiner

CHARRA, Zoila

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

The amendment document filed on Dec. 27 2005 is considered non-compliant because it has failed to meet the requirements of 37 CFR 1.121 or 1.4. In order for the amendment document to be compliant, correction of the following item(s) is required.

**THE FOLLOWING MARKED (X) ITEM(S) CAUSE THE AMENDMENT DOCUMENT TO BE NON-COMPLIANT:**

- ☐ 1. Amendments to the specification:
- ☐ A. Amended paragraph(s) do not include markings.
  - ☐ B. New paragraph(s) should not be underlined.
  - ☐ C. Other \_\_\_\_\_
- ☐ 2. Abstract:
- ☐ A. Not presented on a separate sheet. 37 CFR 1.72.
  - ☐ B. Other \_\_\_\_\_
- ☐ 3. Amendments to the drawings:
- ☐ A. The drawings are not properly identified in the top margin as "Replacement Sheet," "New Sheet," or "Annotated Sheet" as required by 37 CFR 1.121(d).
  - ☐ B. The practice of submitting proposed drawing correction has been eliminated. Replacement drawings showing amended figures, without markings, in compliance with 37 CFR 1.84 are required.
  - ☐ C. Other \_\_\_\_\_
- ☐ 4. Amendments to the claims:
- ☐ A. A complete listing of all of the claims is not present.
  - ☐ B. The listing of claims does not include the text of all pending claims (including withdrawn claims)
  - ☐ C. Each claim has not been provided with the proper status identifier, and as such, the individual status of each claim cannot be identified. Note: the status of every claim must be indicated after its claim number by using one of the following status identifiers: (Original), (Currently amended), (Canceled), (Previously presented), (New), (Not entered), (Withdrawn) and (Withdrawn-currently amended).
  - ☒ D. The claims of this amendment paper have not been presented in ascending numerical order.
  - ☒ E. Other: Pgs. 2-5 are not readable (Blank pages)
- ☐ 5. The amendment is unsigned or not signed in accordance with 37 CFR 1.4.



For further explanation of the amendment format required by 37 CFR 1.121, see MPEP § 714 and the USPTO website at <http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/officeflyer.pdf>.

**TIME PERIODS FOR FILING A REPLY TO THIS NOTICE:**

1. Applicant is given **no new time period** if the non-compliant amendment is an after-final amendment or an amendment filed after allowance. If applicant wishes to resubmit the non-compliant after-final amendment with corrections, the **entire corrected amendment** must be resubmitted within the time period set forth in the final Office action.
2. Applicant is given **one month**, or thirty (30) days, whichever is longer, from the mail date of this notice to supply the **corrected section** of the non-compliant amendment in compliance with 37 CFR 1.121 or 1.4, if the non-compliant amendment is one of the following: a preliminary amendment, a non-final amendment (including a submission for a request for continued examination (RCE) under 37 CFR 1.114), a supplemental amendment filed within a suspension period under 37 CFR 1.103(a) or (c), and an amendment filed in response to a Quayle action.

**Extensions of time** are available under 37 CFR 1.136(a) only if the non-compliant amendment is a non-final amendment or an amendment filed in response to a Quayle action.

**Failure to timely respond** to this notice will result in:

**Abandonment** of the application if the non-compliant amendment is a non-final amendment or an amendment filed in response to a Quayle action; or

**Non-entry** of the amendment if the non-compliant amendment is a preliminary amendment or supplemental amendment.

Carol Barred

Legal Instruments Examiner (LIE)

571-272-3588

Telephone No.

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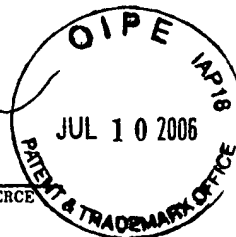
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APPLICATION NUMBER	FILING OR 371 (c) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
10/699,591	10/31/2003	Douglas C. Allan	CRNG.047

VOLENTINE FRANCOS, P.L.L.C.  
Suite 150  
12200 Sunrise Valley Drive  
Reston, VA 20191



CONFIRMATION NO. 2625




\*OC000000018002007\*

Date Mailed: 02/07/2006

**NOTICE REGARDING CHANGE OF POWER OF ATTORNEY**

This is in response to the Power of Attorney filed 01/17/2006.

- The Power of Attorney to you in this application has been revoked by the assignee who has intervened as provided by 37 CFR 3.71. Future correspondence will be mailed to the new address of record(37 CFR 1.33).

  
WUBALEM TSIGIE  
PTOSS (703) 305-3006

FORMER ATTORNEY/AGENT COPY



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APPLICATION NUMBER	FILING OR 371 (c) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
10/699,591	10/31/2003	Douglas C. Allan	SP03-146

Kevin M. Able  
Corning Incorporated  
Intellectual Property Dept.  
SP-TI-3  
Corning, NY 14831

CONFIRMATION NO. 2625



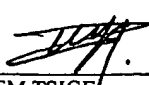
Date Mailed: 02/07/2006

**NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY**

This is in response to the Power of Attorney filed 01/17/2006.

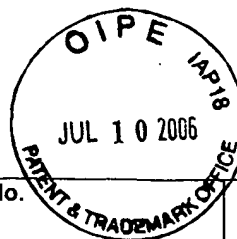
The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

---

  
WUBALEM TSIGE  
PTOSS (703) 305-3006

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# **Notice of Abandonment**

Application No.

10/699,591

Examiner

Zoila E. Cabrera

Applicant(s)

ALLAN ET AL.

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

This application is abandoned in view of:

1. ☒ Applicant's failure to timely file a proper reply to the Office letter mailed on 24 August 2005.
  - (a) ☐ A reply was received on \_\_\_\_\_ (with a Certificate of Mailing or Transmission dated \_\_\_\_\_), which is after the expiration of the period for reply (including a total extension of time of \_\_\_\_\_ month(s)) which expired on \_\_\_\_\_.
  - (b) ☐ A proposed reply was received on \_\_\_\_\_, but it does not constitute a proper reply under 37 CFR 1.113 (a) to the final rejection.  
(A proper reply under 37 CFR 1.113 to a final rejection consists only of: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114).
  - (c) ☒ A reply was received on 27 December 2005 but it does not constitute a proper reply, or a bona fide attempt at a proper reply, to the non-final rejection. See 37 CFR 1.85(a) and 1.111. (See explanation in box 7 below).
  - (d) ☐ No reply has been received.
2. ☐ Applicant's failure to timely pay the required issue fee and publication fee, if applicable, within the statutory period of three months from the mailing date of the Notice of Allowance (PTOL-85).
  - (a) ☐ The issue fee and publication fee, if applicable, was received on \_\_\_\_\_ (with a Certificate of Mailing or Transmission dated \_\_\_\_\_), which is after the expiration of the statutory period for payment of the issue fee (and publication fee) set in the Notice of Allowance (PTOL-85).
  - (b) ☐ The submitted fee of \$ \_\_\_\_\_ is insufficient. A balance of \$ \_\_\_\_\_ is due.  
The issue fee required by 37 CFR 1.18 is \$ \_\_\_\_\_. The publication fee, if required by 37 CFR 1.18(d), is \$ \_\_\_\_\_.  
(c) ☐ The issue fee and publication fee, if applicable, has not been received.
3. ☐ Applicant's failure to timely file corrected drawings as required by, and within the three-month period set in, the Notice of Allowability (PTO-37).
  - (a) ☐ Proposed corrected drawings were received on \_\_\_\_\_ (with a Certificate of Mailing or Transmission dated \_\_\_\_\_), which is after the expiration of the period for reply.
  - (b) ☐ No corrected drawings have been received.
4. ☐ The letter of express abandonment which is signed by the attorney or agent of record, the assignee of the entire interest, or all of the applicants.
5. ☐ The letter of express abandonment which is signed by an attorney or agent (acting in a representative capacity under 37 CFR 1.34(a)) upon the filing of a continuing application.
6. ☐ The decision by the Board of Patent Appeals and Interference rendered on \_\_\_\_\_ and because the period for seeking court review of the decision has expired and there are no allowed claims.
7. ☒ The reason(s) below:

Informal or Non-Responsive amendment was mailed on January 18, 2006 but no response was ever received.

Petitions to revive under 37 CFR 1.137(a) or (b), or requests to withdraw the holding of abandonment under 37 CFR 1.181, should be promptly filed to minimize any negative effects on patent term.



## Notice of Abandonment

Application No.

10/699,591

Examiner

Zoila E. Cabrera

Applicant(s)

ALLAN ET AL.

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

This application is abandoned in view of:

1. ☒ Applicant's failure to timely file a proper reply to the Office letter mailed on 24 August 2005.
  - (a) ☐ A reply was received on \_\_\_\_\_ (with a Certificate of Mailing or Transmission dated \_\_\_\_\_), which is after the expiration of the period for reply (including a total extension of time of \_\_\_\_\_ month(s)) which expired on \_\_\_\_\_.
  - (b) ☐ A proposed reply was received on \_\_\_\_\_, but it does not constitute a proper reply under 37 CFR 1.113 (a) to the final rejection.  
(A proper reply under 37 CFR 1.113 to a final rejection consists only of: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114).
  - (c) ☒ A reply was received on 27 December 2005 but it does not constitute a proper reply, or a bona fide attempt at a proper reply, to the non-final rejection. See 37 CFR 1.85(a) and 1.111. (See explanation in box 7 below).
  - (d) ☐ No reply has been received.
2. ☐ Applicant's failure to timely pay the required issue fee and publication fee, if applicable, within the statutory period of three months from the mailing date of the Notice of Allowance (PTOL-85).
  - (a) ☐ The issue fee and publication fee, if applicable, was received on \_\_\_\_\_ (with a Certificate of Mailing or Transmission dated \_\_\_\_\_), which is after the expiration of the statutory period for payment of the issue fee (and publication fee) set in the Notice of Allowance (PTOL-85).
  - (b) ☐ The submitted fee of \$ \_\_\_\_\_ is insufficient. A balance of \$ \_\_\_\_\_ is due.  
The issue fee required by 37 CFR 1.18 is \$ \_\_\_\_\_. The publication fee, if required by 37 CFR 1.18(d), is \$ \_\_\_\_\_.
  - (c) ☐ The issue fee and publication fee, if applicable, has not been received.
3. ☐ Applicant's failure to timely file corrected drawings as required by, and within the three-month period set in, the Notice of Allowability (PTO-37).
  - (a) ☐ Proposed corrected drawings were received on \_\_\_\_\_ (with a Certificate of Mailing or Transmission dated \_\_\_\_\_), which is after the expiration of the period for reply.
  - (b) ☐ No corrected drawings have been received.
4. ☐ The letter of express abandonment which is signed by the attorney or agent of record, the assignee of the entire interest, or all of the applicants.
5. ☐ The letter of express abandonment which is signed by an attorney or agent (acting in a representative capacity under 37 CFR 1.34(a)) upon the filing of a continuing application.
6. ☐ The decision by the Board of Patent Appeals and Interference rendered on \_\_\_\_\_ and because the period for seeking court review of the decision has expired and there are no allowed claims.
7. ☒ The reason(s) below:

Informal or Non-Responsive amendment was mailed on January 18, 2006 but no response was ever received.

  
6/16/06

Petitions to revive under 37 CFR 1.137(a) or (b), or requests to withdraw the holding of abandonment under 37 CFR 1.181, should be promptly filed to minimize any negative effects on patent term.

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